

State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining JOHN R. BAZA Division Director

July 20, 2015

Steve Schnoor Kennecott Utah Copper LLC 4700 Daybreak Parkway South Jordan, Utah 84095

Subject: Amendment - Seep Water Pipeline, Kennecott Barneys Canyon Mining, Barneys Canyon

Mine, M/035/0009, Salt Lake County, Utah

Dear Mr. Schnoor:

On June 18, 2015, the Division of Oil, Gas and Mining (Division) received the new pipeline plan. On July 7, 2015, the Division received an amendment to the pipeline plan. The new pipeline is adjacent and south of the Barneys Canyon leach pads. The Division has reviewed the data and needs the following information:

- 1. (pnb) Aerial photographs (such as those in Google Earth dated July 3, 2005 and June 17, 2010) indicate that eroded material from the road and possibly the waste rock dump and/or sulfide stockpile have migrated into the drainage and seeps area. It appears that some of the material has been transported down channel to the railroad fill. Determine whether material below the spring capture points has arsenic or other constituents that are higher than appropriate for the post-mining land use.
- 2. (pnb) The conclusion that evapoconcentration is occurring as water flows down drainage appears to be incorrect, since the TDS and other constituents are not also increasing. Reevaluate this conclusion and change the discussion accordingly.
- 3. (pnb) Some of their arsenic numbers appear to be incorrect, and need to be carefully explained if they remain. Specifically, the total arsenic concentrations in three cases (at multiple dates at the C and D sampling locations) are lower than the dissolved concentrations. Total arsenic should be comprised of dissolved arsenic and arsenic present in total suspended solids.
- 4. (pnb) The total iron concentrations also appear to be incorrect, since the total iron was below detection, but the dissolved component was 0.359 mg/l. Correct and explain.
- 5. (pnb) Identify the owner of the existing water rights at the springs.

The Division recommends that remediation work continue as weather permits including buttressing and capping the leach pads.



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The resubmittal will be reviewed and stamped approved or accepted when complete. A copy will returned for your records at that time. The approval or acceptance of a complete notice of intention does not relieve an operator from his responsibility to comply with the applicable statutes, rules, regulations, and ordinances of all local, state and federal agencies with jurisdiction over any aspect of the operator's mining operations.

Please contact Leslie Heppler at 801-538-5257 or me at 801-538-5261 if you have questions about this action. Thank you for your cooperation.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB: lah: eb

cc: DEQ - bhamos@utah.gov, wwcampbell@utah.gov

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